The context of REDD+ in Nepal

Drivers, agents and institutions

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Abbreviations

CBFM	community-based forest management
CF	community forestry
CFM	collaborative forest management
CSO	civil society organisation
DFO	district forest office/officer
FCPF	Forest Carbon Partnership Facility
FECOFUN	Federation of Community Forest Users Nepal
MoFSC	Ministry of Forests and Soil Conservation
NEFIN	Nepal Federation of Indigenous Nationalities
NGO	non-governmental organisation
REDD Cell	REDD Forestry and Climate Change Cell
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RPP	Readiness Preparation Proposal
RWG	REDD+ Working Group
SDC	Swiss Development Cooperation
SNV	Netherlands Development Organisation
TMI	The Mountain Institute
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
USD	United States Dollar
VDC	Village Development Committee
VFCC	Village Forest Coordination Committee
WB	The World Bank
WWF	World Wildlife Fund

About the authors

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Executive summary

This report provides an overview of Nepal's initiatives on readiness for Reducing Emissions from Deforestation and Forest Degradation (REDD+), the political and socio-economic context in which they are taking place, and their implications for conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries. It examines land use change and the drivers and underlying causes of deforestation. It evaluates the effectiveness, efficiency and equity of current REDD+ efforts in Nepal and analyses the prospects for and challenges to REDD+ implementation going forward.

The report draws on multiple data sources and diverse methodologies. It provides an overview of government plans and policies, legislation, and views of experts on development, forestry and the REDD+ sector in Nepal, as well as ongoing debates in Nepal on issues such as forest governance, benefit-sharing and carbon assessment.

Nepal has a high rate of deforestation and forest degradation, which varies across forest management regimes and ecological zones. There are no robust, comprehensive and up-to-date nationwide data on the precise level of deforestation and forest degradation. Multiple drivers—such as high dependency on forests, overharvesting, weak governance, poverty, landlessness and high opportunity costs for agricultural expansion—contribute to deforestation, particularly in the Terai, a narrow, flat and low region in the southern part of the country with fertile soil, dense forests, rich biodiversity and densely populated settlements.

The government's capacity to monitor and address these drivers and underlying causes appears inadequate. In contrast, the community forests, mainly in the hills, are well managed with positive economic, social and environmental outcomes.

Forest officials, civil society organisations and donors exhibit strong enthusiasm for and active involvement in REDD+. A number of REDD+ readiness initiatives, including the Forest Carbon Partnership Facility and projects funded by the Norwegian Agency for Development Cooperation, are being implemented. REDD+ implementation has adopted a participatory and multi-stakeholder process usually involving government agencies, civil society organisations and development partners. However, this process is largely detached from the complex dynamics of deforestation and appears to be limited to technical, administrative and peripheral issues. The core issues of tenure and governance have not received adequate attention.

The multiple drivers of deforestation pose challenges to REDD+ implementation in Nepal. They are often rooted in tenure confusion, weak governance, high opportunity costs and Nepal's ongoing political transition since the end of the Maoist insurgency and abolition of the monarchy in 2006 (efforts to draft a new constitution are still under way). Though the REDD+ initiative generally has adopted a participatory and multi-stakeholder process, it has tended to avoid core substantive issues related to resource conflicts that may eventually lead to failure of the scheme. REDD+ leaders must appreciate the core issues of tenure, governance and benefit-sharing and engage with key actors accordingly.

Acknowledgements

Introduction

This report of the study jointly carried out be CIFOR and ForestAction Nepal, provides an overview of Nepal's initiatives on readiness for Reducing Emissions from Deforestation and Forest Degradation (REDD+), the political and socio-economic context in which they are taking place, and their implications for conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries. It examines the initial REDD+ readiness activities in the context of forest policy and governance, drivers of deforestation and the capacity of the government to reduce emissions through REDD+. It also analyses the prospects for and challenges to REDD+ implementation and the effectiveness, efficiency and equity of REDD+ in Nepal. It reviews government plans, policies and legislation; insights from experts; ongoing debates on forest governance, benefit-sharing and carbon assessment; and lessons learned from REDD+ pilot projects.

The report is organised as follows. The following (second) section reviews trends in forest and land use change and identifies the drivers of deforestation and their underlying causes. The third section analyses forest tenure, governance and institutions, and the fourth section discusses the broader political and economic context within which REDD+ is expected to operate. The fifth section describes national REDD+ initiatives in Nepal, the sixth section discusses prospects and challenges for REDD+ in Nepal, and the final section summarises and draws conclusions.

1 Trends and drivers of deforestation and forest degradation

1.1 Land use and forest cover change in Nepal

Nepal has high geographical and ecological diversity. The country can be divided into three geographical regions (see Figure 1): the mountains (19 percent), hills (64 percent) and Terai (17 percent). It has over 118 ecosystem types and 35 forest types with associated flora and fauna (GoN 2002:3). According to the latest forest inventory (DFRS 1999), forests make up about 29 percent of Nepal's total area and shrubland another 11 percent. Agricultural land makes up 21 percent, non-cultivated land 7 percent and grassland 12 percent. The remainder (20 percent) includes the Himalayas, barren rocks, rivers and roads (CBS 2008).

Forest inventories have revealed that forest cover shrank over the last four decades (Acharya *et al.* 2012) (Table 1). The latest national forest inventory found that during 1978-1994, annual deforestation was 1.7 percent (DFRS 1999). Another study estimated that about 84 000ectares became deforested annually during 1991-2001(CBS 2008). The rates vary by region. For example, the average deforestation rate of Terai during 1991-2001 was 2.7 percent (CBS 2008).
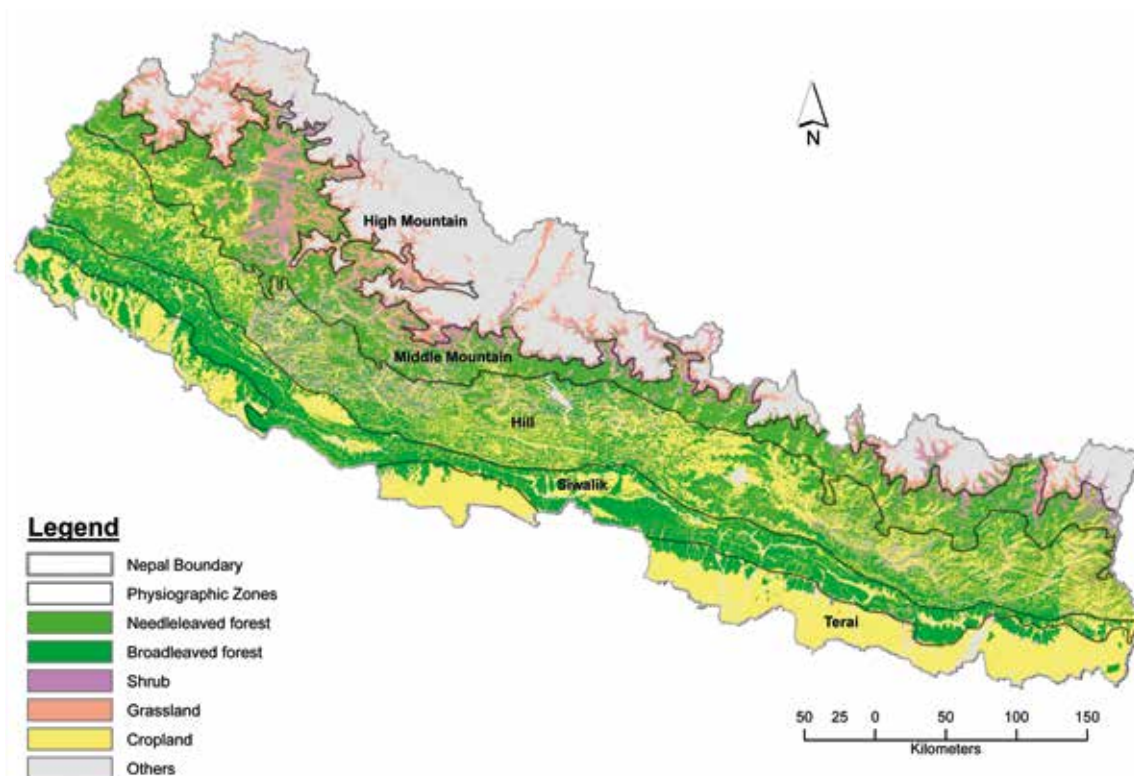

Figure 1. Forest cover in Nepal

Source: European Space Agency. New_portrait_of_Earth_shows_land_cover_as_never_before.
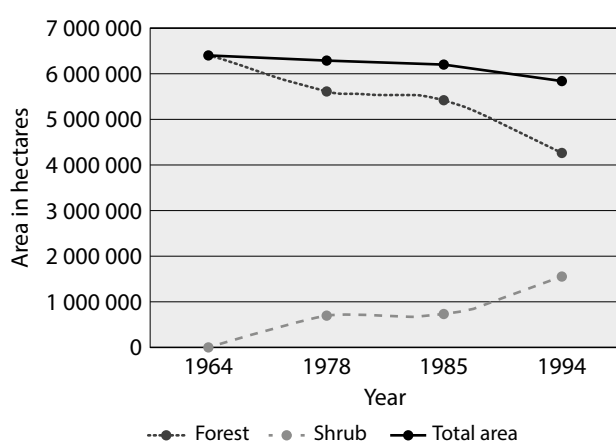
http://www.esa.int/Our_Activities/Observing_the_Earth/Space_for_our_climate/New_portrait_of_Earth_shows_land_cover_as_never_before (December 2012)

Table 1. Forest and shrubland in Nepal

Report	Year	Forest land		Shrubland		Total	
		ha	% total forest land	ha	% of total forest	ha	%
Forest Statistics for the Terai and Adjoining Regions (FSRO 1967)	1964	6 402 000	45.5	-	-	64 022 000	45.5
Land Resource Mapping Project: Summary Report (LRMP 1986)	1978-9	5 616 000	38.1	6 892 000	4.7	62 852 000	42.8
Master Plan for the Forestry Sector, Nepal (HMG/N 1989)	1985-6	5 424 000	37.4	7 062 000	4.8	62 102 000	42.2
1999 Forest Resources of Nepal (DFRS 1999)	1999	4 268 000	29.0	15 602 000	10.6	58 282 000	39.6

Another estimate found that Nepal's deforestation rate was 1.63 percent during 1990-2005 (FAO 2005:10). Contrary to these national trends, some studies have found an increase in forest cover in the Middle Hills, particularly after the expansion of community forestry (CF[1]) (Branney and Yadav 1998, Gautam *et al.* 2003, Carter *et al.* 2011). Unfortunately, the available data are incomplete and inconsistent and do not support clear comparisons (Acharya *et al.* 2012).

Figure 2. Deforestation and forest degradation in Nepal

Sources: FSRO 1967, LRMP 1986, HMG/N 1989

One observation emerging from these inventories is that there is fairly a straight link between decreased forest area and increased shrubland area. For example, while there appears to be a gradual decrease in forest area during 1979-1994, there is a gradual increase in shrub areas during the same time (Figure 2). These trends indicate that forest degradation is much more severe than deforestation *per se.*

1.2 Factors influencing forest cover change

1.2.1 Drivers

The drivers of deforestation and forest degradation vary with the different socio-economic and ecological forces operating in the Mountains, Hills and Terai regions. From the perspective of REDD+ prospects, the Hills and Terai are particularly important—the Hills because of CF that has largely reversed deforestation and forest degradation since the 1990s (Branney and Yadav 1998, Gautam *et al.* 2003), and Terai due to its high rates of deforestation and gloomy prospects. Nepal's REDD Readiness Preparation Proposal (RPP) has identified the following drivers of deforestation: high dependency on forests, illegal and unsustainable harvesting, overgrazing, forest fires, resettlement, forest encroachment, infrastructure development and invasive species (GoN 2010). A recent study commissioned by the government that focused on Terai found similar drivers (MoFSC 2011a).

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1 We have used three similar terms in this report – CF, CFM and CBFM. The term CBFM is used as a generic term to refer to all types of community-based forest management modalities. Community forestry (CF) and collaborative forest management (CFM) are two different modalities within the generic category.

However, these drivers appear rather superficial and do not adequately represent the deeper political economy of forest governance. This is particularly important for Terai, where many underlying causes are critical in accelerating deforestation and forest degradation (Baral 2002, Satyal 2006). A variety of factors exist in Terai, including continued tenure confusion, poor forest governance, demographic and cultural complexity, limited access to markets, the porous border with India and high opportunity costs for agriculture (Baracclough and Ghimire 1995, DoF 2005, Banjade *et al.* 2010, Sinha 2011). Forests of the Terai and Siwalik[2] have experienced overharvesting, illegal logging and conversion into settlements and farmland, and frequent forest fires (DoF 2005). Scholars analysing the historical dynamics of forest conservation, migration and agricultural expansion in Terai have highlighted the eco-political complexity indicating plural and intertwined drivers of deforestation (Ghimire 1992, Shrestha and Conway 1996, Brown 1998, Ojha 2008, Sinha 2011). While a large part of the Terai forests is officially under government control, most of these forests are subject to poor governance, and in many cases are managed as open access (Schoubroeck and Karna 2003). Recurrent fires and unregulated grazing in this region slow regeneration and facilitate the introduction and spread of alien, invasive species.

The scenario in the Hills is quite different. Contrary to many predictions made during the 1970s and 1980s (Eckholm 1976, World Bank 1979, Ives and Messerli 1989), the forests in the mid-Hills have been restored. A study carried out in 15 districts over a 14-year period (LFP 2008) showed an average increase in biomass of 21 percent (1.5 percent per year). These positive outcomes are largely attributed to the popular CF programme (Springate-Baginski *et al.* 2003, Thoms 2008). However, these trends many not occur everywhere, especially in government managed forests. For example, in recent years, unsustainable development activities, particularly construction of seasonal roads and urbanisation, have resulted in

tree felling, landslides and erosion (Adhikari 2002, Bhuju *et al.* 2007).

Nepal's Mountain region is largely inaccessible with scant population and a weak presence of state agencies. Large-scale herding, unsustainable harvesting of non-timber forest products and illegal timber exports to Tibet pose challenges to sustainable forest management in the region (Pandit and Thapa 2003, Satyal 2004, Paudel *et al.* 2006). Unsustainable forest management is often attributed to an institutional vacuum and the absence of adequate technical support from the district forest office (DFO) (Acharya 2003, Paudel *et al.* 2008). Timber and other forest products are used mainly for constructing houses and animal sheds and for fuelwood and fodder.

1.2.2 Agents

An actor-oriented approach explicitly brings key actors and their actions to the forefront of deforestation and forest degradation. In the case of Terai, the major actors include political leaders, forest officials, timber traders, local elites and landless people living in and around forests (CNRM 2010). Intense competition among political leaders for the post of forest minister, repeated reshuffling of senior forest officials and frequent corruption scandals with visible involvement by political leaders and officials indicates poor forest governance in Nepal (Satyal 2006, Sinha 2011). At the local level, forest officials, local leaders and timber traders develop clandestine relations, sometimes termed an iron triangle (Keshav Kanel, personal communication) and carry out illegal logging. Lack of accountability and transparency in the policy process and forest governance has enabled these actors to draw private benefits at the expense of the wider public interest and the health of the forest.

At the other end, poor forest dwellers, often pushed to forest frontiers, have occupied forest lands and have an incentive to gradually remove trees from the land. They tend to support illegal logging as it clears the land for them to cultivate. In the Hills and Mountains, collection of forest products for subsistence needs, along with herding and collection of non-timber forest products and timber for sale, have contributed to deforestation. The major actors in relation to deforestation in Terai are presented in Table 2.

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2 Siwalik comprises the lower hills between the Mahabharat range and Terai, with a relatively dense sal forest. It has recently undergone faster rates of deforestation and degradation (DoF 2005, CNRM 2010).

Table 2. Key actors in deforestation in Terai

Actors	Illicit activities	Motivations
Political leaders and senior forestry staff	Send forest officials to lucrative sites where there is high timber trade and transaction, usually through a non-transparent transfer process; forge clandestine relations with traders; use discretionary power to support substandard practices; manipulate inventories; misinterpret legal or regulatory provisions to meet their own interests.	Maintain authority and control. Maintain techno-bureaucratic hegemony in forest management. Maximise discretionary power. Reduce influence of local government and civil society in the forest sector.
Timber traders	Illegally extract and trade timber; establish clandestine relations with bureaucrats and politicians.	Maximise profit (may also have legal enterprises, but usually earn more from illicit activities). Weaken monitoring and oversight by the Department of Forests. Minimise taxes.
Local elites	Engage in non-transparent transactions; bribe officials for higher allowable harvest misuse leadership position.	Maximise rights and influence.
Landless poor, other forest dwellers and environmental refugees	Encroach on forest land or engage in illegal logging as a livelihood strategy.	Ensure livelihoods security.

1.2.3 Underlying causes

The underlying causes of deforestation and forest degradation in Terai can be grouped into two broad categories:

1. The socio-ecological dynamics in and around forestland in Terai are affected by the region's large contiguous sal forest, which has easy access to markets; the high opportunity cost of agricultural expansion; high population density; social and cultural heterogeneity between hill migrants and the local Madhesi people; increasing demands for regional autonomy; and competing demands for land in the context of growing poverty and food scarcity (Shrestha and Conway 1996, Brown 1998, Baral and Subedi 1999, Conway *et al.* 2000, Miklian 2009). The persistent struggle by landless poor people (*sukumbasi*) for access to forest land is deeply embedded in a political economy of poverty, migration and populist electoral politics and has posed a major challenge for sustainable forest management.

2. The government has maintained bureaucratic control over Terai forests that has excluded a large number of forest-dependent people and has severely alienated local communities.

Vacillating forest policies, protracted tenure confusion, weak governance and fragile local institutions have induced deforestation in Terai (Baral 2002, Ojha 2008, Satyal 2006). Moreover, massive logging to supply timber to British India during the 19th century, and to Kathmandu and other major towns in Nepal in the 20th century, has resulted in severe deforestation (Collier 1928, Graner 1997).

Poor governance is at the heart of continued deforestation and forest degradation in Terai (CNRM 2010). Timber traders often develop clandestine relations with local leaders, politicians and forestry officials and are often protected by them (Paudel *et al.* 2006), due to the high price of timber in the local market and the porous border with India, which encourages illegal exports. The CNRM (2010) report acknowledges that maintaining law and order has been difficult in Terai in the face of ongoing political conflicts resulting in widespread illegal activities including illegal logging, timber smuggling and encroachment on forest lands. In recent years, the Terai region has seen the emergence of a series of identity-based movements, including the Madhesh

and Tharuhat movements and a number of armed underground groups.

A more positive story has been the emergence of community-based forest management (CBFM), which includes diverse community-based modalities. The government of Nepal with support from its development partners introduced CF in the late 1970s (Gilmour and Fisher 1991, Hobley 1996, Malla 2001). Since then, the country has experienced forest regeneration, especially in the hills (Branny and Yadav 1998, Gautam *et al.* 2003, Kanel 2004, Springate-Baginski and Blaikie 2007, Larson *et al.* 2010, NSCFP 2011). Though there has been no comprehensive study on the impact of CF on rural poverty, several scholars have highlighted its contribution to local livelihoods (Kanel 2004, NSCFP 2011).

Despite the policy emphasis on decentralisation and CBFM, the regulatory framework—provided by the Forest Act 1993, Forest Regulations 1995, Forest Products Collection and Sale Guidelines 2000 and Wood Collection Regulation 2006— has favoured the use of discretionary power by forestry authorities (Paudel, Luintel *et al.* 2012). Such power in the hands of bureaucrats has led to price distortion (Banjade *et al.* 2010). For example, cumbersome bureaucratic procedures have increased the transaction costs of timber trading (Bampton and Cammaert 2006, Iversen *et al.* 2006, Paudel, Luintel *et al.* 2012). This is illustrated by the huge gap between the stumpage price and the price to end users—USD 4 and USD 60 per cubic foot, respectively, in 2011 (Rai 2011).

There is also a growing gap between the demand for and supply of forest products, primarily due to the poor management of government controlled forests and the subsistence orientation of most of the CF groups. This has created an informal market around forest product harvesting and processing that poses a major challenge to the sustainable management of forests. A low budget allocation for forestry (1.2 percent of the government budget) (NFA 2008) has limited the human resources, technical expertise and other support available for development of the forest sector. Though the flow of aid to the forest sector was fairly high during the 1980s and early 1990s, it has been gradually decreasing in recent years,

while the area under CBFM has expanded and the agenda for and actors involved in forestry development have expanded; the effectiveness of this aid is also widely contested (Ojha 2012).

The government of Nepal, despite its weak capacity for ensuring compliance, continues to express its commitment to all multilateral environmental agreements on forests, environment and climate change.[3] The government depends heavily on donor funding and often seeks to attract it through these initiatives and other forms of international climate and biodiversity conservation financing. For example, the government has recently declared new protected areas, primarily for biodiversity conservation but also for reducing emissions. It made this decision a week before the Copenhagen climate summit in 2009, and the prime minister shared the decision in his speech at the summit. He expressed Nepal's strong commitment to protecting biodiversity and mitigating climate change. However, expansion of protected areas has induced conflicts with local communities (Paudel *et al.* 12). Establishment of protected areas has restricted access to forest resources, transferred resource management decisions to protected area authorities, denied many traditional resource use practices and, more importantly, increased loss from wildlife depredation (Gurung 2008).

The government declared three new protected areas, proposed an amendment to the Forest Act of 1993 and sought the support of the armed forces to ensure law enforcement in Terai forests. These initiatives indicate a recentralising tendency (Ribot *et al.* 2006). While authorities believe that a centralised approach will help check deforestation, it is less likely to be sustainable in the long run as conflicts are likely to erupt around forest land due to extreme poverty, land hunger and heavy reliance on natural resources (Sinha 2011).

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3 Nepal has signed most multilateral environmental agreements, including the United Nations Framework Convention on Climate Change, Convention on Biological Diversity, Convention on International Trade in Endangered Species, International Tropical Timber Organisation, Ramsar Convention, and United Nations Convention to Combat Desertification.

1.2.4 Dynamics

Structural adjustment programmes during the mid-1980s forced the Nepalese government to introduce financial liberalisation and cut investments in less productive sectors. Decentralisation was adopted during this time, along with the introduction of the 'user group' approach to managing diverse natural resources and social services. Meanwhile, some enlightened forestry professionals sought to promote local participation in forest management to address the continued deforestation and environmental degradation in the hills. Consequently, CF emerged as a management model.

However, in Terai, law and order has often been a challenge, primarily due to weak coordination between key government agencies—the Ministries of Forest, Home Affairs, Land Improvement, and Revenue—as well as local governments (CNRM 2010). Forest ministers and officials often complain of inadequate cooperation from other agencies such as the police, military and local administrations (CNRM 2010). However, other reports have accused forest authorities of direct or indirect involvement in illegal logging and smuggling for personal gain (Anonymous 2011). Clandestine relations between political leaders, forest officials and timber smugglers have weakened official efforts to curb deforestation.

In Nepal, deforestation began in the early twentieth century. The increased demand for timber to make railway sleepers in British India and the ruling elites' interest in converting forest into agricultural land to increase the tax base led to heavy deforestation prior to the 1950s (Regmi 1978). The government's resettlement programme for hill people resulted in massive migration to the Terai during the 1970s and 1980s (Gurung 1989). The construction of a national highway through the heart of the forest and the growth of dense migrant settlements along the highway resulted in massive deforestation (Shrestha and Conway 1996). This was followed by illegal logging, timber smuggling and encroachment during periods of political instability, uncertainty and transition (Sinha 2011).

Large-scale encroachment of forest areas for agriculture and settlements combined with illegal tree felling occurred during the national referendum in 1980, the democratic movement of 1990, the People's Movement of 2006, and subsequent identity-based political movements. During the referendum in 1980, the then prime minister encouraged massive illegal logging to raise money for campaigning in favour of the *panchayat*[4] system. During the 10-year Maoist insurgency, the rebels targeted forest offices, so most of the forestry staff could not remain in the field; that removed restraints on the use of forestland.

Landless people's movements that started in the early 1990s encouraged the conversion of forest land into private agricultural land through the distribution of individual land titles. Identity politics in the Madhesh (southern Terai), particularly the demographic divide between the Hills and Madheshi people, fuelled existing conflicts between CF and collaborative forest management (CFM) in the Terai (Sinha 2011). The government promotes CFM, which promises to benefit the Madhesi population, who otherwise benefit least from CF, as most of the community forests are along the highway in areas populated by hill migrants.

1.3 Monitoring of drivers

Multiple agencies have monitored and reported on the drivers of deforestation. Table 3 summarises the key functions of different agencies in relation to specific drivers identified by the RPP. Interviews with some forest officials revealed that monitoring and documentation are usually weak due to limited human resources, poor logistical facilities and lack of an information management system. There is little cross-institutional sharing of analysis of the drivers and trends of deforestation. Consequently, comprehensive and current information on land use change and its dynamics is often lacking.

1.4 Mitigation potential of Nepal's forest management

Nepal's total carbon stock is roughly estimated to be 897 m tonnes (Oli and Shrestha 2009:63). In relation to REDD+, Nepal's forests can broadly be divided into two categories: (1) community forest,

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4 *Panchayat* is a non-party political system under the absolute Monarchy adopted in Nepal during 1960 – 1990.

Table 3. Monitoring drivers of deforestation and forest degradation

Driver	Who monitors and how
High reliance on forests for subsistence	National Planning Commission receives Central Bureau of Statistics data on forest-people interaction at the local level. Ministry of Forest and Soil Conservation and Department of Forests receive data from DFOs.
Illegal harvest of forest products	DFO compiles data on and registers cases of illegal logging. Anticorruption agency and parliamentary committee monitor through field visits and may provide directives to the government if large-scale deforestation is reported.
Unsustainable harvesting practices	DFO compiles cases of non-compliance with harvesting limits. All petitions against illegal harvesting are recorded at the district level. Regional Directorate compiles forest-related data for the region. Department of Forests maintains national-level data on forest conditions, harvests and revenues.
Forest fires	DFO compiles field report on forest fires and transmits it to Forest Fire Focal Desk in Department of Forests. Cases reported in media are documented by DFO Chief District Officer records reported cases.
Encroachment	DFO maintains data on encroachment. Regional Directorate conducts periodic monitoring. Parliamentary committees, anticorruption agency and local administration bodies monitor individual cases.
Overgrazing	DFO and forest user groups develop rules against overgrazing in their respective jurisdictions and monitor implementation of those rules.
Infrastructure development	Agency that owns the infrastructure produces an environmental examination and environmental impact assessment, which must be approved by Ministry of Environment and Ministry of Forests and Soil Conservation. Agency must prepare and implement an environmental management plan to address the issues pointed out in the initial studies.
Resettlement	Ministry of Land Reform and Ministry of Forests and Soil Conservation jointly plan resettlement and take monitoring responsibility.
Expansion of invasive species	Department of Forest Research and Survey reports on pilot research findings. Department of National Parks and Wildlife Conservation reports on individual protected areas.

largely located in the hills, which is sustainably managed and has reversed deforestation that took place during the 1970s and 1980s and resulted in good biodiversity and inclusive democratic local institutions; and (2) government managed Terai forest with good carbon stock, which has experienced a high rate of deforestation, poor governance and high opportunity costs.

CF provides a good prospect for successful REDD+ where it can incentivise local communities to enhance forest conditions, improve biodiversity, and strengthen inclusive and democratic institutional practices. There are well-established mechanisms and norms for equitable benefit distribution in CF and other CBFM

practices. ICIMOD-led REDD piloting on benefit distribution in CF has also helped revise and develop equitable benefit distribution at different scales of forest governance. These experiences and insights are expected to become the foundation for designing REDD benefit distribution at sub-national and national levels.

Government managed forest, particularly in Terai, presents a different case. As these forests have experienced severe deforestation and forest degradation, the net reduction in emissions could be huge if it became possible to control deforestation there. These are the major forest frontiers in the context of REDD+. However, as discussed above (section 1.2.3), the government's

capacity to address the multiple drivers of deforestation in the region appears relatively weak. This is particularly due to the prolonged political transition and weak state institutions (see section 3). In this context, achieving net reduction in emissions would be a major challenge in Terai.

Some people argue that CF cannot generate much additional emission reduction as these forests are already well managed (Staddon 2009). However, there is ample room for promoting sustainable forest management, enhancing carbon stock, and conserving biodiversity and watersheds (Ojha *et al.* 2008, Pokhrel and Byrne 2009). Local forest managers, particularly the community forest user groups, are involved in forest management for multiple benefits: livelihoods, environmental services, biodiversity and community institutions. Therefore, it appears that the local community may accrue co-benefits by participating in the REDD+ mechanism through improved forest conditions, democratic decision making and equitable benefit-sharing mechanisms (Dhital 2008).

Establishing collaboration and cooperation among diverse actors appears to pose a major challenge in emission reduction. There is little collaboration, despite acknowledgment of its importance in official documents. For example, the RPP reads, 'Coordination between government and non-government bodies is essential for effective implementation of REDD+' (GoN 2010: 47). But in the 12-member REDD Working Group (RWG), nine government ministries are represented, including those responsible for forests, environment, agriculture, and industry. However, only two members are civil society organisations (CSOs)—the Federation of Community Forestry Users Nepal (FECOFUN) and Nepal Federation of Indigenous Nationalities (NEFIN), one from experts (usually from donors)—and none are from the private sector. The exclusion of the private sector, inadequate representation of civil society and limited outreach to rural communities have posed challenges in the readiness process for REDD+ implementation (Bushley and Khatri 2011).

2 Policies and institutions shaping forest cover change

2.1 Forest governance

Historically, Nepal's forests have been owned and managed by the government. The Department of Forests and Department of National Parks and Wildlife Conservation have been primarily responsible for managing the national forests and protected areas, respectively. The Department of Forests is responsible for protecting, managing, and regulating forests on public land and for regulating private forests. In principle, all forests should be managed on the basis of approved management plans, but exceptions are not rare. Government attempts to develop and implement management plans for large tracts of Terai forest (for example, the Bara Forest Management Plan of 1996) failed, due mostly to lack of resources, weak institutional capacity and, in some cases, the government's inability to garner support from the local community, other local stakeholders and civil society. (Satyal 2006). Similarly, the Department of National Parks and Wildlife Conservation is responsible for regulating and managing the land in the protected area system, which covers 23.4 percent of Nepal. Local communities, mainly community forest user groups, are managing almost one-fourth of the forest area under their own forest management plans, approved by the concerned DFO or protected area warden. While the majority of the hill forests are under community management, the forests of Terai are primarily under government management.

The governance challenges continue to be critical, particularly on the forest frontier in Terai. A recent study stated that Nepal saw the worst deforestation in 30 years (i.e. after 1980) (NRMC 2010) and suggested that most of the underlying causes of deforestation (discussed in section 1.2.3 of this paper) are closely associated with poor governance. Chaotic politics at the national and local levels has resulted in impunity across the political,

bureaucratic and societal domains (Einsiedel *et al.* 2012). Consequently, the policy and programmatic decisions made in Kathmandu are too weak to shape stakeholder behaviour in Terai.

Media reports and reports by government-commissioned investigative missions as well as frequent reshuffling of DFOs in Terai indicate the challenges of governance, including corruption, in the forest sector (Paudel *et al.* 2006, CNRM 2010). In a news conference announcing its investigation report, the chair of the Committee on Natural Resources and Means said, 'corruption in the forestry sector has been found to be at its peak. It needs to be addressed immediately' (Bhusal 2010).

Over the past six decades, the Terai region has experienced heavy migration and resettlement of people from the Middle Hills. The resettlement has caused tension between the original inhabitants and the migrants (Miklian 2009). It has been argued that while hill migrants acquired and benefited from fertile farms and forest lands in Terai, the original settlers still suffer from poverty and landlessness (Miklian 2009). The exclusionary policies of the state, which are often perceived to be heavily influenced by the interests of the new settlers, have resulted in deep mistrust and contributed to identity politics by different social groups. Weak law enforcement and lack of robust local institutions for managing forests have provided fertile grounds for timber smuggling, particularly in Terai.

There are governance gaps within the community managed modalities too, due mainly to the high value of timber, elite dominance, and clandestine relations between local political leaders, forest officials and timber traders (Iversen *et al.* 2006, CNRM 2010). Unfortunately, CSOs are too weak

to adequately scrutinise and correct governance problems in forestry in general and in Terai in particular. CSO agendas and operations have often been influenced by donor agencies, and they have not been able to adequately prioritise and contribute to improving forest governance as they focus on project deliverables (Shah 2002).

Furthermore, the institutional capacity of the government forestry authority is inadequate to ensure sustainable forest management. A recent organisational assessment of the Ministry of Forests and Soil Conservation (MoFSC) pointed out a critical lack of human resources (Acharya *et al.* 2008). Support from several donors to strengthen the institutional capacity of the forest sector appears to have had few long-lasting results. Apart from a lack of technical forest expertise, there is a dearth of weapons for the armed forest guards to ensure effective patrolling and protection (CNRM 2010). Moreover, establishing adequate coordination and cooperation among different government agencies, such as the Ministry of Home Affairs and the Ministry of Land Reform, has remained a challenge (GoN 2008). Without the latter's full support, deforestation and forest degradation cannot be reversed.

Unlike agricultural land, forest lands are largely owned by the state and therefore are targeted for public infrastructure such as roads, canals, hospitals and schools. Forest authorities are under constant pressure to release forest lands for non-forestry purposes. Meanwhile, forest frontiers are the sites of struggle between forest authorities and landless poor people (*sukumbasi*), many of whom have migrated from the hills and taken refuge in forest lands. Because of their numbers and political significance, the government has at times distributed forest lands to them by forming powerful land commissions. However, the distribution of land has often been incomplete, has been guided by potential political gain, and has failed to adequately address the problem (Upreti *et al.* 2008).

2.2 Decentralisation and benefit-sharing

The administration of land and natural resources is highly centralised in Nepal. The central ministries play a major role in policymaking and in regulating

different aspects of resource management. Different ministries are responsible for forests, land, agriculture, mining, energy, physical planning and irrigation. For example, the MoFSC manages forests through its own departments, regional directorates, 74 DFOs and 20 protected area wardens. While several other sectors such as agriculture, education and health are decentralised at the level of local government (district development committees and village development committees) and operate within them. The District Forest Office, on the other hand operates directly under the Department of Forests. Consequently, local governments, non-state agencies and local communities have weak ownership in forest policy and governance issues.

Most agricultural land in Nepal belongs to private landowners, most of whom are small and marginal farmers. There is a scarcity of agricultural land; almost half of the landholdings are less than 0.5 hectares (CBS 2001). Private landowners enjoy full property rights and the sole benefits from their lands. Of land tax revenues, 75 percent goes to local governments (village development committees and municipalities) and only 25 percent goes to the central treasury. However, central agencies oversee land transactions and control the income generated by these transactions.

Revenue-sharing arrangements vary across CBFM modalities. In the case of CF, the group enjoys all the benefits, though a 15 percent royalty is charged for two species, sal (*Shorea robusta*) and sissoo (*Dalbergia sissoo)*, whenever these are sold in the market. However, in the case of CFM, the group enjoys only 15 percent of the timber revenue. In leasehold forestry, the group enjoys benefits from managing the forest lands but does not have access to the standing trees that existed during the initial handover. In protected areas, different arrangements exist for sharing benefits, which are usually distributed as development investments and do not involve cash benefits at the household level.

The existing arrangements for revenue-sharing can form a good basis for designing benefit-sharing arrangements under REDD+. However, the diversity of these arrangements under different forms of CBFM may make it difficult to design any uniform rule across the different models. Moreover, many of the existing arrangements

are subject to contestation and negotiation. For example, in CF, the government has recently proposed to charge a royalty of 50 percent on timber rents, and in CFM, local groups are arguing that they should get more than a 15 percent share. Since the current political transition is moving towards a new federal system from a unitary state, revenue-sharing is likely to become more complicated once the country enters into a federal system. The revenue-sharing arrangement for government managed forests is even less clear. Garnering local support for conservation is likely to be a challenge unless there is clear incentive for contributing to forest protection.

There are equally pressing issues of intra-community equity in benefit-sharing in CBFM. As different people rely on different components of forests, these are arranged based on rules developed collectively. The forest-based revenue is invested in collective benefits—usually community infrastructure, education, health, drinking water and forest management. In recent years, revenue has also been invested in capacity building and income support for poor and marginalised groups. Nepali society is highly differentiated and hierarchically structured along the lines of economic status, gender, caste and ethnicity (Bennett 2006). While women carry out most of the forest protection and management activities, they are usually excluded from decision making institutions (Agarwal 2000, Khadka 2010). Usually, upper-caste men from wealthier families dominate the institutions and influence decisions that usually end up in unfair benefits flowing to a few elite families. Consequently, there are persistent problems of elite capture in decision making and benefit-sharing even in community-based forestry (Agarwal 2000, Thoms 2008). Several studies have shown gaps between better off and poor, male and female, dominant caste and Dalit or indigenous groups (Rai-Paudyal 2008, Khadka 2010).

2.3   Forest tenure arrangements and community rights

According to Nepal's Interim Constitution of 2007, the ultimate rights to natural resources are vested with the state as the sole representative of its citizens. The state owns all public natural forests.[5] However, the forests are managed under different modalities: protected areas, government managed forests, community forests, leasehold forests, religious forests, CFM and buffer zone community forests.

The government owns and manages protected areas and other large forest tracts, and government agencies prepare, approve and implement the management plans. The government enjoys the right to protect, manage and regulate these forests. It also reserves the right to sell forest products and to issue licenses and permits for concessions. However, in certain cases, such as in protected area buffer zones, the government shares revenue with local communities.

The government has transferred some management rights to local communities and other entities under different management modalities, based on approved management plans that are subject to periodic renewal (legally mandated for 5 or 10 years). Among these, CF, leasehold forestry, CFM and buffer zones community forestry are important modalities. Each has a unique tenure and institutional arrangement and enjoys a different bundle of rights. In CF, forest resources are handed over to local communities based on an approved management plan. The communities are granted use rights, management rights and exclusion rights, but not alienation rights (in other words, the communities cannot sell the forest lands). However, in practice a number of hurdles remain during sale of timber in the market (Bampton and Cammaert 2006, Paudel *et al.* 2008). All the traditional users of any particular forest become members of the community forest and, through a general assembly, form an executive committee for day-to-day operations.

CFM, a partnership between central government, local government and a local community, is operational in a few districts in Terai, governed by a multi-stakeholder body and executed by an implementation unit led by a government forest officer. In contrast, leasehold forestry involves a small group of poor households that is allowed to manage a small patch of forest and benefit from it.

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5   Only a few farmers have managed forests on their private lands. Today there is only 2360 ha of registered private forest (DoF 2010).

Buffer zone community forestry is similar to CF but operates in protected area buffer zones that prioritise biodiversity conservation in management.

In recent years, debate over forest carbon rights in CBFM has emerged, as these forest lands are owned by the government but local communities are managing and benefitting from them. The campaign for decentralised and participatory forestry began in the early 1980s and expanded mainly during the 1990s. FECOFUN, other CSOs, people-oriented forestry professionals and many government forest officers supported the strengthening and enhancing of CF. Some argue that the government can claim the below ground carbon pool. Others argue that the below soil carbon can be directly attributed to past forest conservation and the credit should go to local communities. This issue may attract further debate as the country moves towards preparing the national REDD+ strategy, a process that has not started yet. In the case of state-managed forests, carbon rights remain with the government, though the local communities often contest them.

Indigenous peoples' movements have been very strong in Nepal in recent years, particularly since the People's Movement in 2006. The Parliament ratified International Labour Organisation Convention 169—that requires state parties to respect rights of indigenous people—in 2007, as a part of inclusive governance reform. Since then, diverse groups of indigenous people have begun to organise and consolidate their voices, articulating

the experiences of exclusionary domestic practices with international initiatives aimed at securing their rights. In recent years, they have attained a critical mass within political parties and CSOs and have exerted substantial pressure for greater rights, autonomy and participation in managing natural resources, among other goals.

NEFIN is implementing projects that aim to increase indigenous people's awareness of REDD+ and ensure that their rights and interests are respected in national and international policy and legal frameworks (NEFIN 2010). NEFIN representatives are involved in the RWG and many related policy forums and processes. However, there is little awareness among indigenous people in Nepal of the concept and process of REDD+ (Bushley 2010). The debate at the national level has not been translated into any specific policy decisions. Four years after ratifying Convention 169, there is still no explicit law on indigenous self-government, land tenure and rights to carbon. Many complexities have been recognised in realising Convention 169 and other international instruments on the rights of indigenous people. A lack of distinct indigenous territories and the presence of highly mixed settlements imply that various social groups have to rely on a commons from which non-indigenous people cannot be excluded. Some critics argue that the indigenous people's movement has often been misused to support vested political interests and that the movement has been over-politicised.

3 Political economy of deforestation and forest degradation

Nepal has a predominantly feudal agrarian subsistence economy, with heavy dependence on land and forests. The emerging urban economy relies heavily on remittances, tourism and foreign aid. A small ruling class has historically monopolised politics and the economy by controlling political or government institutions (Bhattarai 2003). Continued political turmoil and transition has eroded accountability among political and bureaucratic institutions. Consequently, corruption and impunity have been institutionalised at all levels in government institutions, the private sector and civil society (TIN 2010). Despite significant national political movements and regime change, there has been no fundamental progress towards a democratic and accountable political system (Einsiedel *et al.* 2012). Meanwhile, each such change has resulted in heavy deforestation (Dangi 2009, LFP 2010).

The decade-long Maoist-led conflict (1996-2006), the People's Movement of 2006 and the lengthy political transition that followed have undermined political accountability, increased impunity and weakened established institutions (Einsiedel *et al.* 2012). This has direct influence on sectoral politics and policymaking. Elites at different levels have taken advantage of the political transition and security lapses and engaged in illegal logging and other illicit activities (Satyal 2006, CNRM 2010). This instability has also weakened prospects for addressing poverty and resource dependency, posing serious challenges to sustainable forest management in Terai.

Deforestation and forest degradation are also the outcome of the wider political economy and sectoral policies. In Nepal, policies and investments, particularly related to agriculture, infrastructure and energy, have an important bearing on sustainable forest management. The Agricultural Perspective Plan was designed to transform subsistence farming into modern commercial farming with rural access roads, irrigation and infrastructure development (GoN 1995). The New Agricultural Policy (2003), Agro-Biodiversity Policy (2007) and Agriculture Development Strategy (currently under development) are geared towards modernising agriculture. However, these policies are hardly implemented. Though the government's agricultural policies have had little direct impact, increasing demand for land and food scarcity have induced encroachment on forest lands.

In recent years, the government has placed a high priority on hydropower development, given the huge gap between its economically feasible capacity of 43 000 MW and actual production of less than 500 MW (Nepal Electricity Authority 2012:34). The government has increased the threshold for the environmental impact assessment requirement. For example, hydropower-related policies (especially the Energy Strategy 2010 and 2011) waive the requirement for conducting an environmental impact assessment for power stations and transmission lines, which could lead to substantial tree felling (MoFSC 2006, 2008). There are legal provisions for compensation; for example, projects that build roads, irrigation canals and other infrastructure must plant 25 trees for each tree they fell (MoFSC 2006). However, these provisions are not properly monitored or enforced, primarily due to weak institutional capacity and a deeply rooted culture of impunity. This poses a serious risk of deforestation. In contrast, subsidies for kerosene, biogas, micro-hydropower, solar power and

improved cooking stoves have had a positive effect on protecting forests (Mahat 2004).

Unlike many other countries, Nepal has no substantial production of specific commercial commodities, either on agricultural land or on forest land, that significantly impact deforestation *per se*. Crops like sugar cane, tobacco and ginger are being planted at commercial scale in existing crop fields. Cardamom, broom grass and coffee are being grown either on forest land or at the farm-forest interface. However, the increasing price of many non-timber forest products and aromatic plants in the international market has encouraged farmers to collect more of these products from natural forests, leading to deforestation (Pandit and Thapa 2003, MoEST 2008)[6].

Roads, irrigation canals and cement plants are important additional areas for which foreign investment is being sought. While there is little foreign direct investment in Nepal, international financial institutions, particularly the World Bank and Asian Development Bank, have provided loans to the government in these areas. In one exception, Indian investment is significant in cement production and some forest-based products (including resin and turpentine). Mining of sand, boulders and stone, for the domestic market and increasingly for export to India, is said to have serious impacts on deforestation (CNRM 2010). Several contradictions and ambiguities exist between sectoral policies and laws in areas such as agriculture, forestry, mining, local governance, energy and trade (MoLD 2011).

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6   All major species of non-timber forest products in Nepal—including Gobre Salla (*Abies wabbiana*), Yarcha Gomba (*Cordyceps sinensis*), Jatamansi (*Nardostachys jatamansi*), Pipla (*Piper longum*) and Chiraita (*Swertia chiraita*)—are exported to international markets, mainly to India and usually in raw form (Marasaini 2006). High market value has induced unsustainable harvesting of all such products (Pandit and Thapa 2003).

4 REDD+ policy environment

4.1 Climate change policy process

Nepal has recently been active in national and international climate change policy processes. As a least developed country, it does not require a Nationally Appropriate Mitigation Action plan. Instead it has developed a National Adaptation Programme of Action (approved in 2010), a framework for a Local Adaptation Programme of Action (approved in 2011) and a national climate change policy (approved in 2011). Some of these plans and policies are reflected in the periodic development plans and are being implemented. Many sectoral policies—for example, the Agriculture Development Strategy—have been revised to mainstream climate change. Discussion on establishing a Climate Trust Fund is ongoing. The government is planning to create an institutional mechanism under the National Adaptation Programme of Action to access international climate funds such as Least Developed Country Funds and Adaptation Funds.

Nepal does not have any projects on afforestation or reforestation under the Clean Development Mechanism, though it has been implementing Clean Development Mechanism biogas and micro-hydropower projects for several years. This is mainly due to unavailability of large areas of barren land for afforestation, the regeneration capacity of natural forests and the high costs of developing such projects. The biogas projects are suffering from the weak capacity of the stakeholders, and there have been complaints about poor record keeping and monitoring that raised concerns about verification. Moreover, there are governance challenges within the Alternative Energy Promotion Centre, the proponent of the Clean Development Mechanism project in Nepal, and the Ministry of Energy, which has been restructured several times in recent years, resulting in disturbances to the data management and reporting systems as well as weakened institutional memory that directly affects stakeholder coordination and delays project approval.

4.2 REDD+ policy dynamics

The REDD+ process began in Nepal after the Conference of Parties 13 of the United Nations Framework Convention on Climate Change in Bali in December 2007. Soon afterwards, the government of Nepal began a dialogue on REDD+ readiness and submitted the REDD Readiness-Plan Idea Note in March 2008. After that was approved, the MoFSC established the REDD Forestry and Climate Change Cell (REDD Cell), an administrative unit, in January 2009 to prepare the RPP, which was approved by Forest Carbon Partnership Facility (FCPF) of the World Bank in October 2010. The ministry has formed a three-tiered REDD+ institutional framework consisting of (1) the high-level, inter-ministerial Apex Body, (2) the multi-stakeholder RWG and (3) the REDD Cell. The Apex Body and the RWG are multi-stakeholder forums.

Table 4 provides details on REDD+ policy initiatives in Nepal since 2008. A number of development agencies have also implemented projects that support general awareness, carbon measurement and some piloting of payment mechanisms.

Currently, the FCPF, through the RPP, has been supporting the REDD+ Cell in conducting studies and developing policy initiatives towards REDD+ readiness. In this process, the REDD+ Cell carried out the appraisal of deforestation and forest degradation, helped establish the institutional mechanism for coordinating and facilitating REDD+ initiatives and facilitating exchange and sharing between diverse projects, institutions and initiatives, and is developing a national REDD+ strategy.

Table 4. REDD+ readiness initiatives

Dates	Event
March 2008	World Bank approved Readiness-Plan Idea Note
January 2009	Ministry of Forests and Soil Conservation established three tiers of REDD+ institutions (Apex Body, RWG, REDD Cell)
November 2009	National REDD+ workshop held, RPP presented and discussed among the stakeholders.
February 2010	RPP progress update presented
March 2010	Apex Body formalised
April 2010	RWG finalised RPP
April 2010	The APEX body endorsed RPP
October 2010	World Bank approved RPP

Initially, REDD+ was overly simply understood as a win-win game and potential trade-offs were less explicit. There were few conflicts between development agencies, forest authorities, non-governmental organisations (NGOs) and local communities during this phase. Consequently, there was strong cooperation and collaboration between the REDD Cell and CSOs in advancing REDD+ readiness. Stakeholders actively participated and contributed to the REDD+ process, particularly during the preparation of the RPP.

As the country progressed towards REDD+ readiness, several critical issues surfaced— including tenure rights and access to traditional forest resources, carbon rights, unfinished work on forest governance reform, the role of the government in carbon trading (particularly in benefit distribution), and social differentiation and safeguards. CSOs, particularly FECOFUN, NEFIN and the Dalit Alliance for Natural Resources, have raised the concern that their rights might be compromised in the future by REDD+. Because of their strong grassroots base, these networks have been able to exert substantial pressure on the authorities.

Forest sector actors involved in the REDD+ process have assumed diverse roles (Table 5). While government agencies are involved in developing REDD+ policies and strategies, non-state actors are involved in educational activities, promotion of local communities' rights, capacity development, carbon assessment, and piloting

benefit-sharing mechanisms. Different agencies have prioritised different areas of engagement. For example, some are involved in grassroots capacity building, others in piloting benefit-sharing, and others in technical assessment of carbon. There appears to be good cross-institutional sharing and learning, particularly on technical issues such as measurement of biomass and carbon. Many of these exchanges are facilitated by the REDD Cell.

4.3 Consultation process and multi-stakeholder forums

Nepal's RPP development process is said to have adopted a participatory and consultative process involving local community groups, forest-dependent poor people, local governments, NGOs, community networks, and professional groups (Dangal 2008:12). The consultation and outreach component was led by a consortium of citizen networks and NGOs that helped make it inclusive and participatory.[7] The grassroots networks of FECOFUN, NEFIN and the Himalayan Grassroots Women's Natural Resources Management Association on one hand, and experts on participatory consultation on the other, made it possible to bring out the voices of different actors. The team developed outreach materials, conducted

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7 The seven organisations carrying out stakeholder consultation and participation (component 1b of the RPP) are FECOFUN, the Nepal Foresters' Association, ForestAction, Dalit Alliance for Natural Resources, HIMAWANTI, Association of Collaborative Forest Users Nepal and NEFIN.

Table 5. Key REDD+ readiness actors

Actor	Involvement in REDD+
REDD Cell	Implements RPP; develops REDD strategy and other policy and legal instruments; coordinates with other government agencies and NGOs
Department of Forests, Department of Forest Research and Survey, Department of National Parks and Wildlife Conservation	Serve as members of RWG
Ministries of Environment, Energy, Agriculture and Local Development	Serve as members of RWG and Apex Body
FECOFUN	Serves as member of RWG, implementing partner of the Norwegian Agency for Development Cooperation/ Regional Community Forestry Training Centre project on grassroots capacity building, and implementing partner of the project on developing a REDD payment mechanism; leads CSO alliance on REDD+
NEFIN	Serves as RWG member; implements project on rights of indigenous people
Association of Collaborative Forest Users Nepal, Nepal Foresters' Association, Dalit Alliance for Natural Resources, Himalayan Grassroots Women's Natural Resource Management Association	Involved in RPP background studies, conduct awareness programme on REDD+, members of CSO alliance
UK Department for International Development, Netherlands Development Organisation, Swiss Development Cooperation, US Agency for International Development, Finnish government, World Wildlife Fund, Winrock, CARE, International Union for the Conservation of Nature, Mountain Institute, Regional Community Forestry Training Centre, International Centre for Integrated Mountain Development	Growing interests and support to REDD+ initiatives through GOs/NGOs; provide financial and technical support for RPP development; carry out educational activities; capacity building piloting on carbon measurement, institutional mechanism, exploring voluntary market
ForestAction Nepal	Conducts research on REDD+ policy process; provides critical intellectual inputs to REDD Cell and CSO alliance

stakeholder meetings and workshops and carried out expert consultations.

However, critiques argue that consultation during the RPP development process and in other REDD+ pilot projects have not been effective in promoting participation by disadvantaged groups (Bleaney *et al.* 2009, Gurung *et al.* 2011). Women in particular did not get the opportunity to participate due to their limited access to public space and low capacity to articulate their concerns (Gurung *et al.* 2011, WOCAN 2012). While multi-stakeholder forums have been formed at different levels to govern the REDD+ process, women and other marginalised groups are poorly represented in them. These bodies are represented by heads of government departments and NGOs, who are predominantly male. For example, there is only one women out of 12 members in the RWG and none in the Apex Body. It appeared that the REDD+ process could not overcome shortcomings similar to those experienced in CBFM, where the poor, women, Dalits, and minorities have generally been excluded and marginalised (Nightingale 2002, Giri and Darnhofer 2010).

4.4 Future REDD+ policy options

There are significant opportunities for realising synergy between REDD+ and adaptation policy development in Nepal. For instance, Nepal's National Adaptation Plan of Action has put

strong emphasis on sustainable forest management and recommends state support for diverse strategies such as biogas development to reduce pressure on the forests. This would help enhance REDD+ effectiveness by addressing the drivers of deforestation (Gregersen *et al.* 2011). Integrated management of forest, livestock and farms in Nepal would be a more comprehensive way to approach Reducing Emissions from All Land Use (REALU) and has been suggested as an effective climate response strategy (Joshi *et al.* 2010). Accordingly, the RPP has conceived REDD+ in its broadest sense and has considered five activities for payment under REDD+ schemes:

1. reducing deforestation
2. reducing forest degradation
3. sustainable management of forests
4. conservation of forest carbon
5. enhancement of forest carbon stock

Beyond these, government officials and stakeholders usually argue that the social and institutional capital generated by CF should also be considered for payment under REDD+ schemes as it has important bearings on sustainable forest management. The RPP reflects the popular demands of forest user groups in Nepal and values the socio-economic benefits of forest management in addition to emission reduction (Ojha *et al.* 2008). Based on the long history of CF, gender and social inclusion and multiple benefits including biodiversity must be embedded in Nepal's REDD implementation (Ojha *et al.* 2008, Pokhrel and Byrne 2009).

A number of donors have made financial commitments to support the REDD+ readiness phase. The World Bank, through the FCPF, has already approved USD 3.4 million to implement the RPP, particularly in developing policy and a legal and institutional framework for REDD. Many bilateral donors, such as the UK Department for International Development, Swiss Development Cooperation, US Agency for International Development and Government of Finland, are committed to supporting various aspects of REDD readiness through their ongoing forestry projects. Some others will provide technical assistance, vehicles and equipment (for example, the Netherlands Development Organisation and Japan International Cooperation Agency).

The RPP calls for development of a reference level at the national level, but expects that it will also be possible to develop sub-national scenarios using the same approach. There are strong reasons to favour a national-level scenario. First, the forests are small (on average, 85 ha) and managed by a large number of groups (with an average of 125 members), and carbon credit buyers are unlikely to be interested in working with so many different entities. Second, there would be high transaction costs for measurement, reporting and verification at the sub-national level. Third, only national-level accounting would address the potential leakage that may occur due to small forest size and group sizes. Though this is especially the case for the hills, many of these issues also exist in Terai.

On the other hand, there are equally compelling arguments for sub-national-level accounting. First, as the government's capacity and credibility for ensuring equitable benefit-sharing are usually questioned by stakeholders, it is preferred to have sub-national accounting in order to have better control of forest communities and stakeholders. Second, under the national carbon projects, the gain achieved by the communities' conservation efforts could be nullified by the poor management of government controlled forests. This would in turn kill incentives for forest protection by the communities that manage the forests. Third, only sub-national accounting would ensure performance-based payments, the core logic of REDD+. Since different dynamics are at play in different ecological zones, at different scales and under different forest tenure regimes, performance-based payments may function better if they are developed at the sub-national level. For example, as CF generally works better in the hills than in Terai, the hill CF may benefit from sub-national accounting.

The RPP proposes the Department of Forest Research and Survey as the key institution to maintain a national geographical and forest carbon stock database. However, given the lack of a nationwide historical reference baseline and inadequate institutional capacity of the Department of Forest Research and Survey, there are considerable challenges for establishing an aerial monitoring system. The data should be relevant to actors at different levels, though this may increase the cost of generating the data. There is a high

reliance on the Finnish-supported Forest Resource Assessment project for generating data and for building the capacity of stakeholders. However, the Forest Resource Assessment project appears to be focused on technical aspects with several gaps on social and institutional aspects[8]. Also, the database may not be very useful to diverse actors such as local governments, NGOs and community-based organisations, as their involvement in the whole process is too weak.

Fair distribution of REDD+ funds to legitimate claimants will be a major issue, given the diverse forms of forest tenure, differentiated society and poor institutional performances at all levels. A general assumption is that the government will get the REDD+ benefits for government managed forests and communities will get the benefits for the community managed forests. But millions of people live close to government forests and use them who are not formally recognised as forest managers—for example, landless people, flood victims and herders. What would be the incentive for these people under REDD+? It appears that though the benefit distribution arrangements for CBFM are better, a suitable arrangement for government managed forests is yet to be developed.

Meaningful participation by relevant government ministries and departments and non-state actors is considered important for the successful implementation of REDD+ (GoN 2010:47). The Apex Body and RWG at the central level, district forest coordination committees at the district level and village forest coordination committees at the village level are proposed as the key multi-stakeholder mechanisms. The experiences of the RWG and district forest coordination committee show that representation and accountability are crucial for achieving desirable outcomes for the multi-stakeholder process. A functional and cordial relationship between the governing multi-stakeholder bodies (for example, RWG and district forest coordination committees) and the implementing agency (REDD Cell and DFO) is critical. At present, many stakeholders, particularly

the grassroots citizen networks, are not satisfied with the composition and decision making process of these multi-stakeholder bodies, as government officials are overly represented on them.[9] Forest-dependent people—such as landless people, forest dwellers, fuelwood collectors and charcoal makers—are largely excluded.

Notwithstanding these shortcomings, these bodies provide legitimate spaces to express marginal civic concerns. There are diverse initiatives aiming at more effective and efficient decision making and benefit-sharing. For example, a project implemented by ICIMOD, FECOFUN and the Asia Network for Sustainable Agriculture and Bioresources has a separate carbon trust fund arrangement at national level and formed REDD+ Net at the watershed level in the project sites. Nepal's proposed move to a federal structure may have implications for the currently proposed mechanism, as the restructuring may affect the forest tenure regime and institutional arrangements for governing forests.

Generally, three types of activities are promoted for increased participation of stakeholders and local communities: awareness, consultation and capacity building (Paudel *et al.* 2010). First, an introductory awareness campaign focusing on the concept and process at the national and international levels is emphasised. Customised strategies, such as written materials for literate people and audio visual materials for illiterate people, are proposed. Second, different methods including workshops, public hearings, small meetings and interactive radio and television programmes are proposed for consultation. Third, capacity building on specific technical, institutional and leadership skills is proposed to ensure the meaningful participation and involvement of various social groups. The key assumption is that interest in and capacity to engage and contribute to the process are critical for encouraging people to participate in REDD+.

Forest tenure and governance have not received sufficient attention in the REDD+ process. Though the RPP acknowledges a need to clarify

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8 Twelve civil society organisations in Nepal submitted the *Civil Society Position Paper on National Forest Resource Assessment Project* to the Government of Nepal and the Finnish Embassy in Kathmandu to raise this issue (CSO Alliance 2010).

9 The issue of lack of genuine and effective participation by non-state actors has been raised several times during formal and informal REDD civil society alliance meetings.

forest tenure, it remains neutral and apolitical and does not establish a direction for accomplishing this. In the highly contested arena of forest tenure in Nepal, a clear, comprehensive and secure tenure for local communities is a prerequisite for successful REDD+ implementation (Basnet 2009, Hatcher 2009, Persha and Hayes 2010). Despite the apparent appreciation for community-based management in Nepal, there are constant threats to community rights. The recent move of the government to amend the Forest Act of 1993 and Department of Forests circulars to DFOs on restricting communities from managing their forests indicate the uncertainty surrounding tenure security (Sunam *et al.* 2010). Citizen federations such as FECOFUN and NEFIN have promoted a rights discourse within REDD+, but these campaigns have not been able to draw substantial attention to tenure and governance in the debate so far (Bushley and Khatri 2011).

Policy learning through piloting and experimentation is one of the important features of REDD+ initiatives in Nepal. Diverse initiatives, particularly on carbon assessment and benefit-sharing, are being conducted, and the government has generally encouraged these initiatives (MoFSC 2011b). However, as Giri and Ojha (2011) observed, Nepal's forest governance suffers from techno-bureaucratic domination, which can put a damper on innovation. The government's exhaustive bureaucratic process and the World Bank's tough procurement policies may not allow adequate flexibility and adaptability (Bushley and Khatri 2011).

5 Opportunities and challenges for REDD+ in Nepal

5.1 Poor forest governance poses a challenge to REDD+

The governance and institutional context of Nepal's forest sector may undermine the effectiveness of REDD+ implementation. The ongoing political transition and associated uncertainty have hampered long-term planning. The Master Plan for the Forestry Sector (HMG/N 1989) has expired, and the government has formed a multi-stakeholder task force to develop a new forest sector strategy. Meanwhile, there is no guiding document for long-term planning, and most short-term policy decisions are made on an *ad hoc* basis. Consequently, the forest sector has suffered from confusion and conflict. Most recent government policy decisions have been contested and challenged by CSOs, particularly FECOFUN—including expansion of protected areas, the President Churia Conservation Programme, proposed amendments to the Forest Act of 1993, and revisions to timber pricing. Reports by a number of government commissions and independent scholarly studies have highlighted several challenges for the state institutions and have cast doubts on their capacity to deal with the complex drivers of deforestation, especially in Terai (Shrestha and Conway 1996, Ojha 2008, Sinha 2011). This may seriously undermine the implementation of REDD+.

The consultative initiatives of the REDD Cell, increased multi-stakeholder decision making and active engagement by CSOs provide grounds for optimism. The influential role of FECOFUN and other CSOs has helped balance the power to ensure adequate consultation with relevant stakeholders. In this context, governance and institutional reforms—particularly decentralisation, strengthening of MoFSC's institutional capacity, improvement of law enforcement and efforts to build confidence in government institutions—are critical to successful REDD+ implementation in Nepal (NFA 2009).

5.2 Further tenure reform may help REDD+ implementation

Thousands of community forest user groups actively managing forests provide grounds for hope for successful REDD+ implementation in Nepal (Ojha *et al.* 2008, Pokhrel and Byrne 2009). CF is the locus of REDD+ because of its effective and low-cost forest management and fairly equitable benefit-sharing mechanism (Bleaney *et al.* 2009, Dahal and Banskota 2009, Cronkleton *et al.* 2011). However, its apparent low cost may not take into account the opportunity costs of rural people who sacrifice everyday forest resource use (Karky and Skutsch 2009). Therefore, a clear, comprehensive and secure tenure arrangement is a prerequisite for effective and equitable REDD+ implementation (Larson 2010, Anderson 2011). Studies on forest tenure have shown that CBFM is a good institutional vehicle for reducing deforestation, generating co-benefits and distributing forest management benefits, thereby giving hope for reduced deforestation (Persha and Hayes 2010, Cronkleton *et al.* 2011).

Unfortunately, a large tract of Terai forest, most of which is under government management, has experienced heavy deforestation. Deforestation has occurred even in the community forests to a lesser extent. Media reports suggest that illegal logging and unsustainable harvesting have occurred in Terai despite the government's attempts to curb illegal logging (Bhushal 2010). Recent policy moves declaring new protected areas and

strengthening government control in CF may further alienate communities, thereby weakening the local stewards (Sunam *et al.* 2010, Paudel, Jana and Khatiwada 2012). The continued confusion, conflict and tenure insecurity may undermine REDD+ implementation.

Land reform, particularly providing tenure security over cultivated lands, is integral to effective implementation of REDD+ (GoN 2010). Recognising this, the Ministry of Land Reform has been included in both the Multi-stakeholder Climate Change Initiatives Coordination Committee and the REDD+ Apex Body. However, detailed proposals have yet to emerge, and given Nepal's prolonged political transition, reform appears some distance away (Wily *et al.* 2008).

5.3   Reliable measurement, reporting and verification remain a challenge

There are three major challenges in relation to measurement, reporting and verification. First, existing institutions have to achieve the capacity to adopt modern technologies for assessment, monitoring and verification of emission changes. The existing human resources are scattered across different institutions. Previous forest assessment projects in Nepal did not adequately consider capacity development. Outside the government domain, it is even more challenging. Given their low education levels, socially marginal groups, particularly women and Dalits, cannot actively participate and influence the process. Consequently, they may have little command over the measurement, reporting and verification aspects of REDD+. Second, there are biophysical limitations. Nepal's forest patches are diverse and mostly small. There are over 35 forest types and 118 ecosystem types with different carbon content and sequestration potential, demanding customised methodologies and formulas for carbon assessment. At the same time, due to steep and variable mountain slopes, it is difficult to interpret remote sensing data. Third, a good reference base is lacking. The previous assessments were neither comprehensive enough to cover the diverse aspects of forest resource assessment nor comparable due to different methodologies (Acharya *et al.* 2009). The only comprehensive data available are

for 1978 and may not help much in setting the national reference scenario. These shortcomings seriously challenge the effectiveness and efficiency of REDD+ implementation.

5.4   Multi-stakeholder mechanisms are preferred for REDD+ payments

Citizen networks, CSOs and donors have cast doubt on the capacity of government institutions to effectively and efficiently channel REDD+ money to beneficiaries. FECOFUN and NEFIN leaders often say that they do not trust government agencies to distribute REDD payments in a fair and timely manner. Therefore, they have proposed a multi-stakeholder-led Forest Carbon Trust Fund to carry out this role. Similarly, some major forest sector donors have expressed fear of fiduciary risk within the government fund mobilisation system and have sought a different route to channel their funds. The US Agency for International Development has chosen a consortium led by an international NGO to channel its funds, and the UK Department for International Development, Swiss Development Corporation and Finnish government rely on similar multi-stakeholder mechanisms.

One of the commonly expressed issues is the risk of corruption or misuse; if REDD+ money does not reach those who are managing forests, the link between payments and conservation outcomes could be broken (Brown 2010). The Ministry of Finance would resist the operation of any trust funds outside the central treasury. The Ministry has made it compulsory for all types of funds—including the money designated for buffer zone communities—to be channelled through its formal official budgetary procedure, called Red-Book.

Existing multi-stakeholder processes also attract a number of criticisms concerning their governance, particularly lack of representation and non-democratic practices. FECOFUN has long opposed the district forest coordination committees, for example, because they are dominated by government agencies and CSOs are in a weak minority position. Women, forest-dependent poor people, and indigenous people have not been able to adequately influence

and contribute to the REDD readiness process (Gurung *et al.* 2011). One of the major reasons could be the low deliberative competence of these groups and their difficulty in comprehending the complex REDD process and articulating their concerns within the larger goals of reducing emissions. In addition, the overlapping of roles as some actors assume responsibility for both decision making and implementation is a concern as it is against the principles of good governance. A project funded by the Norwegian Agency for Development Cooperation to develop a payment mechanism and pilot the Forest Carbon Trust Fund has also revealed several governance issues around REDD+ benefit-sharing arrangements (Khatri *et al.* 2012).

While CF may have good potential to reduce emissions, the scenario may change if Reducing Emissions from All Land Use is taken into consideration. Nepal suffers food scarcity in many mountain districts. Two options for addressing this are to expand land area devoted to agriculture, which would require further conversion of forest lands, and to adopt agricultural intensification, which may result in increased emissions—thus neutralising carbon sequestered through forest conservation.

5.5 Stakeholder enthusiasm is decreasing

Participation and stakeholder engagement were encouraging during early REDD+ initiatives in Nepal. The REDD Cell, development agencies, and natural resource management-related citizen networks were actively involved through the RWG and a number of projects on carbon assessment, payment mechanism and capacity building.

However, strategies to promote participation by local communities and stakeholders are largely limited to the national level, and even to a small number of people in the government bureaucracy, development agencies, a few NGOs and a couple of citizen federations. The forest bureaucracy on the whole is poorly informed about and involved in the REDD+ process. REDD+ is yet to be institutionalised within the Department of Forests line of accountability down to DFOs. The REDD Cell exists as a separate wing of the MoFSC and is largely isolated from its institutional structure. Apart from a few trainings, nothing bridges the REDD Cell and the forest bureaucracy.

The multi-stakeholder process, despite its general acceptance, has faced a number of challenges to delivery of expected outcomes. All actors have not been able to adequately articulate their interests and contribute to and influence the process, and therefore many are becoming frustrated; government agencies are perceived by many to dominate the formulation of forest policies and practices (Ojha *et al.* 2012). Moreover, the representativeness and legitimacy of the process and the performance of the representatives are being questioned. In many cases there is conflict between CSOs' populist agendas and the government's bureaucratic rationale.

5.6 Horizontal coordination is more symbolic than substantive

Multi-stakeholder bodies are proposed as the key vehicle for horizontal coordination. For example, the REDD+ Apex Body and the RWG were formed at the central level to strengthen coordination across government ministries and departments. Similarly, district forest coordination committees and village forest coordination committees are proposed as coordinating bodies at the district and local levels. However, the members of these multi-stakeholder bodies are usually institutional heads and do not have the time to fully understand and contribute to the REDD+ process. Consequently, there is a lack of meaningful discussion of the critical issues of forest governance and drivers of deforestation. A false consensus on cross-institutional coordination is usually forged without deep exploration of potential trade-offs or conflicts, which may result in weak coordination in practice. Therefore, these bodies simply approve whatever is proposed to them by the respective secretariats (for example, REDD Cell). It appears that these bodies have merely served the purpose of establishing political legitimacy. These limitations pose real challenges for ensuring effective REDD+ implementation in Nepal.

6 Conclusion

Nepal has experienced substantial deforestation and forest degradation resulting in conversion of forest land into shrub and agricultural land. While obvious factors such as overharvesting, encroachment, fire and invasive species have exacerbated deforestation, it is also affected by deep-rooted issues such as poverty, inequality and the struggle for control over resources. Deforestation is embedded in a complex socio-political dynamic involving multiple actors, relations of power between them and a range of social-ecological factors. Proper documentation, regular monitoring and in-depth analysis of the drivers and dynamics of deforestation are lacking.

Two major forest management regimes in Terai that are important in the context of REDD+, CF and government managed forests, have experienced different governance challenges. In CF, the forests are better managed and there are no immediate threats of deforestation, though there are ongoing government-community conflicts and intra-community equity questions. In government managed forests, multiple drivers of deforestation operate with complex dynamics involving trade-offs with agricultural expansion and the timber trade, conservation interests, *sukumbasis'* struggle for land, regional politics and the porous border with India. This is compounded by the prolonged political transition, unstable government and weak institutional capacity of the forest authority to curb deforestation.

Nepal is preparing for REDD+ with support from FCPF and a number of other REDD+ policy, institutional and methodological initiatives. These initiatives have largely adopted a multi-stakeholder approach, which was very active during the early phase but appears to be meeting with decreased enthusiasm recently. CSOs are concerned over the adoption of a rather technical and peripheral process in REDD+ and argue that the core issues of tenure, governance and institutional reform have been overlooked.

Overall, prospects remain good for REDD+ implementation in Nepal, yet immense challenges exist. A robust policy, legal and institutional foundation for CF and well-functioning community institutions are necessary for sustainable forest management in Nepal. The performance of CF and other CBFM modalities give grounds for optimism that they can deliver carbon sequestration and other co-benefits.

However, there are enormous challenges from the larger political and socio-economic context, the paucity and diversity of institutional arrangements and the unique nature and distribution of forest types. The process of REDD+ implementation has just begun. There is much enthusiasm among stakeholders and local communities, which does not necessarily appear to be warranted. Therefore, a more realistic assessment of what can be achieved is required. Because of uncertainty regarding the international REDD+ institutional architecture, many technical issues—such as reference level, additionality and leakage—need to be resolved to enable the effective, efficient and equitable implementation of REDD+ in Nepal.

The prolonged post-conflict political transition, including the stalemate in the peace process and deep disagreement on key elements of the new constitution, have added uncertainty and frustration. The REDD+ readiness process may face enormous challenges as the government and other stakeholders at the centre have little control over forest management, especially in Terai.

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This report provides an overview of Nepal's initiatives on readiness for Reducing Emissions from Deforestation and forest Degradation (REDD+). It presents the status of forest cover change; identifies the drivers of deforestation, institutional and distributional factors in the country; analyses the political economy of land use change; revisits the REDD+ process; and assesses prospects for effective, efficient and equitable outcomes of the same.

Nepal has a high rate of deforestation and forest degradation, though there exists no robust, comprehensive orupdated information to show the precise rate. Multiple drivers—such as high dependency on forests, over harvesting, weak governance, landlessness and high opportunity costs for agricultural expansion—contribute to deforestation. The government's capacity to monitor and address these drivers and underlying causes appears inadequate.

Forest officials, civil society organisations and donors exhibit strong enthusiasm for and active involvement in REDD+. Over half a dozen diverse REDD+ readiness initiatives are being implemented by the government and non-state actors. REDD+ implementation has adopted a participatory and multi-stakeholder process usually involving government agencies, civil society organisations and development partners. However, this process is largely detached from the complex dynamics of deforestation and appears to be limited to technical, administrative and peripheral issues. The core issues of forest tenure security and governance reform have not received adequate attention.

A robust policy, legal and institutional foundation for community forestry and well-functioning community institutions provide a strong foundation for REDD implementation in Nepal. However, there are enormous challenges from the larger political and socio-economic context, the paucity and diversity of institutional arrangements and the unique nature and distribution of forest types.

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